IWE CLAIM:

- 1. A method of sizing shoes on a foot, comprising:
- 5 obtaining a digital image of the foot;
 - generating a trace outline of the foot from the digital image;
 - deriving foot data from the trace outline;
 - comparing the foot data to corresponding data for a plurality of shoes;

and

- outputting an indicator of the best fitting snoe from among the plurality of shoes based on the results of the comparison.
 - 2. A method of sizing shoes as claimed in claim 1, further comprising approximating at least one portion of the trace outline with at least one mathematical curve.
 - 3. A method of sizing shoes as claimed in claim 2, further comprising storing data relating to the at least one mathematical curve for visually representing the at least one portion of the trace outline.

20

25

15

- 4. A method of sizing shoes as claimed in claim 3, wherein the step of deriving foot data comprises deriving a plurality of foot data points from the trace outline, and the at least one mathematical curve is derived to match the trace outline at any foot data points in the at least one portion of the trace outline.
- 5. A method of sizing shoes as claimed in claim 2, wherein a heel portion of the trace outline is approximated by a half-ellipse.
- 30 6. A method of sizing shoes as claimed in claim 2, wherein an inside arch portion of the trace outline is approximated by a B-spline curve.
 - 7. A method of sizing shoes on a foot, comprising:

20

30

- 17

obtaining a digital image of the foot;

generating a trace outline of the foot from the digital image;

deriving foot data from the trace outline; and

outputting at least one of: the foot data and an indicator of shoe size

based on the foot data.

- 8. A method of sizing shoes as claimed in claim 7, further comprising approximating at least one portion of the trace outline with at least one mathematical curve.
- 9. A method of sizing shoes as claimed in claim 8, further comprising storing data relating to the at least one mathematical curve for visually representing the at least one portion of the trace outline.
- 15 10. A method of sizing shoes as claimed in claim 9, wherein the step of deriving foot data comprises deriving a plurality of foot data points from the trace outline, and the at least one mathematical curve is derived to match the trace outline at any foot data points in the at least one portion of the trace outline.
 - 11. A method of sizing shoes as claimed in claim 8, wherein a heel portion of the trace outline is approximated by a half-ellipse.
- 12. A method of sizing shoes as claimed in claim 8, wherein an inside25 arch portion of the trace outline is approximated by a B-spline curve.
 - 13. A system for sizing shoes for the foot of a user, comprising:
 - a computer adapted to receive a digital image of the foot, the computer having stored thereon a software package, the software package including an image processing component, wherein the image processing component is adapted for receiving the digital image of the foot and producing a trace outline of the foot, the software package including a foot

30

data component, wherein the foot data component is adapted to receive the trace outline and determine foot data from the trace outline.

- 14. A system for sizing shoes as claimed in claim 13, wherein the software package has a comparator component and the comparator component is adapted to receive the foot data and generate, based on the foot data, at least one of an indicator of the shoe size of the foot and an indicator of the best fitting shoe from among a plurality of shoes.
- 10 15. A system for sizing shoes as claimed in claim 14, wherein the computer is adapted to access a shoe information database, and the comparator component is adapted to compare the foot data with corresponding data for at least one shoe in the shoe information database.
- 15 16. A system for sizing shoes as claimed in claim 13, wherein the foot data comprises at least one of: the foot length, the foot width, the metatarsal length and the heel width.
- 17. A system for sizing shoes as claimed in claim 13, wherein the foot20 data comprises all of the foot length, the foot width, the metatarsal length and the heel width.
 - 18. A system for sizing shoes as claimed in claim 13, wherein the software package is adapted to store a representation of the trace outline on a computer readable memory.
 - 19. A system for sizing shoes as claimed in claim 13, further comprising an input device for generating the digital image of the foot, wherein the input device is connected to the computer.
 - 20. A system for sizing shoes as claimed in claim 19, wherein the input device is a scanner.

21. A system for sizing sho s as claimed in claim 13, wherein the computer is a shoe sizing c mputer, the input device is a scann r and a second computer, the scanner is connected to the second computer, and the second computer is connected to the shoe sizing computer.

5

22. A system for sizing shoes as claimed in claim 11, wherein the second computer is connected to the shoe sizing computer via the Internet.